

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) An apparatus for managing access for an extranet, comprising:
a plurality of domain web server, to which a plurality of users are subscribed,
an authentication and authorization (AA) server for managing access authentication and
authorization for the domain web server,
an authority information storing module for storing authentication information and
authorization information of the users, and
a user web browser interconnected with the AA server and the domain web server,
wherein the AA server comprises:
an AA module for authenticating the users and setting Role values in an AA cookie of
the authenticated user; ~~playing a role of authentication and authorization;~~
an access control list (ACL) cache control module for synchronizing ACL caches of the
respective domain web server with the AA server; an encryption module for
encrypting the AA cookies to be given to each the users; and
a schema provider and user provider for providing an operation system independent of
the authority information storing module,
wherein the domain web server comprises:
an ACL cache which is delivered from the AA server;
an AA module for checking, by using the ACL cache, whether the user has authority to
access a requested resource accesses;
~~an ACL cache which is delivered from the AA server;~~
a decryption module for decrypting the encrypted AA cookies; and

a module for processing a resource request from the user web browser,

wherein the domain web server is configured to extract the Role values from the AA cookie of the user, extracts an access control entry (ACE) of the requested resource from the ACL cache, and grant an access authority to the user if the ACE of the requested resource exists in the extracted Role values.

~~wherein the domain web server checks the user authority by using ACL information, respectively, and produces the encrypted Role information cookie, this cookie signal being authenticated in the AA server 300, and, after authentication, Role, ACL, and ACE information is stored in the authority information storing module.~~

2. (Currently Amended) A method of managing access for an extranet, performed in the apparatus which comprises the elements in claim 1, the method comprising the steps of:
an ACL initialization operation comprising:

an AA module of a domain web server requesting the ACL cache control module of the AA server to synchronize an ACL; and
the ACL cache control module referring the ACL from the authority information storing module and delivering the referred ACL data to the AA module of the domain web server;

an authorizing operation in authentication comprising:

a user web browser accessing the domain web server;
the AA module of the domain web server confirming access authority of the user web browser;
the user web browser requesting the authentication from an AA module of the AA server;

the AA module of the AA server referring a schema provider to the authority;
the schema provider referring an authority information storing module to a site and
delivering the referred result to a user provider; and
the user provider referring the authority information storing module to the user authority
to make authentication, setting Role values in an AA cookie of the authenticated
user, and transmitting the AA cookie to the user web browser; and
an authority referring operation comprising:
a user web browser requesting a page (URL) access from the domain web server;
the AA module of the domain web server checking whether the user has an authority to
access the requested page by comparing the Role values in the AA cookie and
ACEs of the ACL cache; and
the resource request processing module processing the requested page (URL) and
responses to the user web browser by sending a processed result.

~~a user web browser accessing a domain web server;~~
~~an AA module of the domain web server confirming access authority of the user web~~
~~browser;~~
~~the user web browser requesting the authentication from the AA module of the AA server;~~
~~the AA module of the AA server referring a schema provider to the authority;~~
~~the schema provider referring an authority information storing module to a site and~~
~~delivering the referred result to a user provider; and~~
~~the user provider referring the authority information storing module to the user authority to~~
~~make authentication and set user authority, and transmitting the information to the user~~
~~web browser.~~

3. (Currently Amended) The method of claim 2, further comprising a user authority changing step comprising:

if the user web browser requests the service enlisting or quitting, the resource request

processing module of the domain web server requesting the AA module of the AA server to enlisting/quitting,

the AA module of the AA server changing the user authority information and sending the information to the user provider,

the user provider updating the user information by sending the changed information to the authority information storing module,

the AA module of the AA server reporting to the resource request processing module that the user information was changed, such that the user is informed that the enlisting/quitting process is completed.

4. (Currently Amended) The method of claim 2, further comprising:

~~an ACL initialization step comprising: the AA module of the domain web server requesting the ACL cache control module of the AA server to the ACL cache; and the ACL cache control module referring the ACL cache from the authority information storing module and delivering the referred data to the AA module of the domain web server, and~~

an ACL synchronization operation step comprising:

a supervisor instructing the ACL cache control module of the AA server to change the authority; and

the ACL cache control module requesting the authority information storing module to

ACL change the ACL, and the ACL cache of the domain web server to synchronize the ACL cache synchronization.